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SECURITY INFORMATION
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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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(b)(3)

COUNTRY : Germany (Sov Zone)

DATE DISTR. 4 JUN 52

SUBJECT : "Stalin's Organ"-- An Experimental Installation for the Production of Heavy Water

NO. OF PAGES 2

NO. OF ENCLS. 1 (LISTED BELOW)

(b)(1)
(b)(3)

SUPPLEMENT TO REPORT NO.

(b)(3)

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/Background:

1. previously provided information on Soviet development of heavy water installations, including the unit known as "Stalin's Organ",

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The sketch appears with this report as Enclosure (A). explanation of its operation, appears below./

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Explanation of Enclosure (A)

2. Heavy water of low concentration passes from catalyst cell one to cells 2, 3, etc, and flows from the last cell as about 95% heavy water. It then goes to an electrolytic cell in the center of the ring of catalyst cells where it is partially decomposed with an electric current. The

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[redacted]

[illegible] gen passes off as waste, while the hydrogen, with a high percentage of [illegible] content, is circulated back through the catalyst cells from the last cell to the first in the direction counter to the flow of the water. About 25% of KOH is added to the electrolytic cell as an electrolyte. The water obtained from the electrolytic cell, after being partly electrolyzed, is 99-100% heavy water

-end-

Enclosure (A) -- Stalin's Organ (Experimental Installation for the Production of Heavy Water)

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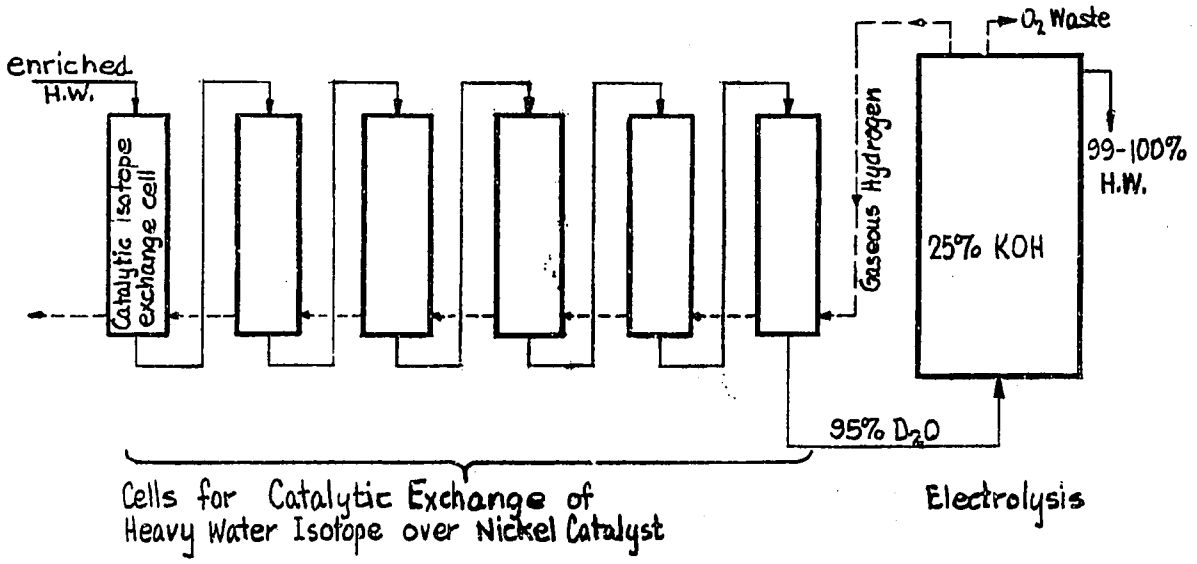
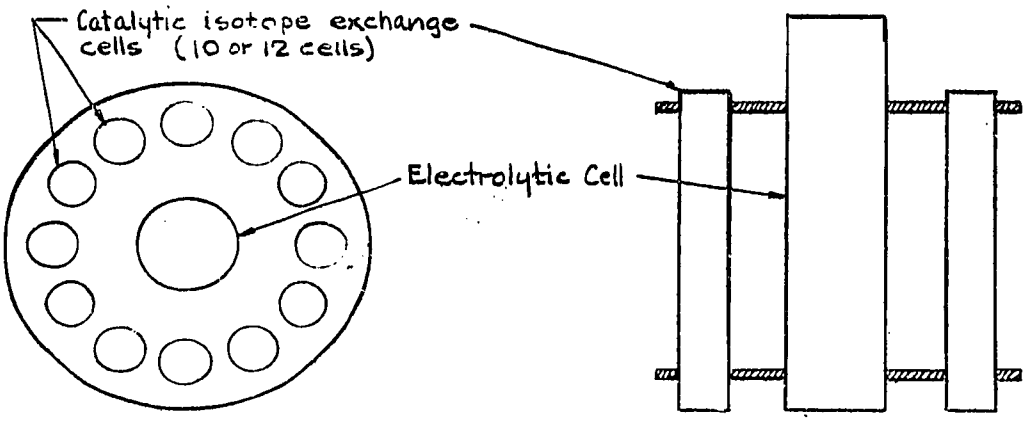
ENCL. A



DIAGRAMATIC SKETCH OF HEAVY WATER PRODUCTION



PLAN VIEW of Installation

VERTICAL SECTION of INSTALLATION

"STALIN'S ORGAN"

(EXPERIMENTAL INSTALLATION FOR THE PRODUCTION OF HEAVY WATER)

ENCLOSURE (1)

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